



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/647,440

08/26/2003

Kil-soo Jung

1793.1004

1637

49455 7590 06/12/2008

STEIN, MCEWEN & BUI, LLP
1400 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20005

EXAMINER

CHIO, TAT CHI

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

06/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/647,440	Applicant(s) JUNG ET AL.	
	Examiner TAT CHI CHIO	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/5/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/10/2007 has been entered.

Response to Arguments

2. Applicant's arguments filed 12/10/2007 have been fully considered but they are not persuasive.

The applicant argues that Lamkin does not disclose event registration to check whether the user performed the action.

In response, the examiner respectfully disagrees. Lamkin discloses event registration to check whether the user performed the action in Table A.1.41. Table A.1.41 check if a User Operation is valid and the main purpose of this command is to retrieve the current UOP (User Operation) status. Checking the validity of a user operation can be done if there is a user operation, therefore, this information provides whether the user performed an action. Furthermore, since the main purpose of this command is to retrieve the current user operation status, checking whether user performed an action is needed before retrieving the current user operation status.

The applicant argues that Lamkin fails to disclose “when a second event occurs using second event information recorded in the markup document, the ENAV engine refrains from informing the AV playback engine of the occurrence of the key input event”

In response, the examiner respectfully disagrees. Lamkin discloses that the navigation buttons, up, left, right, and down, in one embodiment, do not work for DVD navigation unless video is playing a full-screen mode. The examiner deems that “when video is not playing a full-screen mode” is a second event. Therefore, when the video is not playing a full-screen mode (second event), the navigation buttons do not work and therefore, the key input event will not be informed to the AV playback engine by the ENAV engine.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Lamkin et al. (US 7,178,106 B2).

Consider claim 1, Lamkin et al. teach an apparatus to reproduce AV data in an interactive mode, the apparatus comprising:

- an AV playback engine that plays back the AV data (422, 426 and 734 of Fig. 7);
- an ENAV engine that interprets and executes a markup document (742, 410, 702, 704, 706, 708, 701, 712, 714, and 716 of Fig. 7); wherein, when a key input event corresponding to a user action occurs, the ENAV engine informs, by default, the AV playback engine of the occurrence of the key input event, and allows the key input event to occur using first event information written in the markup document (col. 19, lines 44-47), which includes event registration information to check whether the user performed the action (Table A.1.41);
- wherein, when a second event occurs using second event information recorded in the markup document, the ENAV engine refrains from informing the AV playback engine of the occurrence of the key input event (col. 19, lines 51-53).

Consider claim 3, Lamkin et al. teach the apparatus, wherein the ENAV engine generates an API command to control the AV playback engine, in response to the key input event corresponding to the user action (col. 11, lines 56-66).

Consider claim 5, Lamkin et al. teach the apparatus, wherein, when the key input event occurs using the first event information, the ENAV engine transmits a playback control command corresponding to the key input event to the AV playback engine to handle the key input event (col. 11, lines 54-67 and col. 12, lines 1-15).

Consider claim 6, Lamkin et al. teach the apparatus, wherein when an onclick event occurs using the first event information, the ENAV engine transmits a playback control command corresponding to the onclick event to the AV playback engine to handle the onclick event (col. 19, lines 44-47).

Consider claim 7, Lamkin et al. teach the apparatus, wherein the ENAV engine comprises an interface handler that informs the AV playback engine of the occurrence of the key input event (702 of Fig. 7).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamkin et al. (US 7,178,106 B2) in view of Kanazawa et al. (US 6,580,870 B1).

Consider claim 8, Lamkin et al. teach a playback device, comprising: a reader to read AV data (736 of Fig. 7); an ENAV engine, coupled to the reader, a blender and an AV playback engine, the ENAV engine outputting a key input event signal to the AV playback engine in accordance with user input, receiving a trigger signal from the AV playback engine, sending a control signal to the AV playback engine, and receiving a markup document, verifying, interpreting, executing and sending an interpreted markup document to the blender in accordance with the trigger signal (742, 410, 702, 704, 706,

708, 701, 712, 714, and 716 of Fig. 7); the AV playback engine, coupled to the ENAV engine, the blender and the reader, to, upon receiving the key input event signal from the ENAV engine and determining a point in time required to trigger the markup document, send the trigger signal to the ENAV engine, and control play back of DVD-Video data in accordance with the key input event signal from the ENAV engine (422, 426 and 734 of Fig. 7); wherein the ENAV engine allows the key input event signal to occur using first event information written in the markup document (col. 19, lines 44-47), which includes event registration information to check whether the user performed the action (Table A.1.41) and when a second event occurs using second event information recorded in the markup document, the ENAV engine refrains from informing the AV playback engine of the occurrence of the key input event (col. 19, lines 51-53); but fail to teach the blender, coupled to the ENAV engine and the AV playback engine, to blend and output a DVD-Video stream that has been played back with the interpreted markup document.

Kanazawa et al. teach the blender, coupled to the ENAV engine and the AV playback engine, to blend and output a DVD-Video stream that has been played back with the interpreted markup document (113 of Fig. 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a blender into the system to display the video and HTML page together on the monitor.

Consider claim 9, Lamkin et al. teach the playback device, wherein the AV data includes DVD-Video data and a markup document (col. 5, lines 55-57).

Consider claim 10, Lamkin et al. teach the playback device, wherein the playback device operates in one of: an interactive mode, a video mode, and a full-screen mode that is a sub-display of the interactive mode (col. 19, lines 41-44).

Consider claim 11, Kanazawa et al. further teach the playback device, wherein the playback device fetches a markup document from a network (100 of Fig. 16).

Consider claim 12, Lamkin et al. teach the playback device, wherein one of: when a first event information is recorded in the markup document and a first event occurs using the first event information, the ENAV engine informs the AV playback engine of the occurrence of the first event (col. 19, lines 44-47); when a key input event corresponding to a user action occurs, the ENAV engine informs, by default, the AV playback engine of the occurrence of the key input event (col. 19, lines 44-47); when second event information is recorded in the markup document and a second event occurs using the second event information, the ENAV engine prohibits the AV playback engine from being informed of the occurrence of the key input event corresponding to user action of the second event (col. 19, lines 51-54); and when third event information is recorded in the markup document and a third event occurs using the third event information when the user input is forwarded directly to or prohibited from being forwarded to the AV playback engine, the ENAV engine performs an operation corresponding to the third event (col. 19, lines 58-59).

Consider claim 13, Lamkin et al. teach the playback device, wherein the ENAV engine comprises: a parser and interpreter (612 of Fig. 6); an interface handler (614 of Fig. 6), coupled to receive user input, to the parser and interpreter, to the AV playback

engine, and to a decoder; and the decoder (626 of Fig. 6), coupled to the parser and interpreter and to the interface handler.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHI CHIO whose telephone number is (571)272-9563. The examiner can normally be reached on Monday - Thursday 9:00 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571)-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/647,440
Art Unit: 2621

Page 9

/T. C. C./
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621